



FAA Approved Facility

2 Element CRPA L1/L2 GPS Antenna
 P/N: 1.2G1215P2S-XNMM-4-S (J1 = L1 RHCP & J2 = L2 RHCP)
 P/N: 1.2G1215P2-LXNMM-4-S (J1 = L1/L2 RHCP, J2 = L1/L2 LHCP)
 P/N: 1.2G1215P2L-XNMM-4-S (J1 = L1/L2 Linear E, J2 = L1/L2 Linear H)

Antenna Mounts: <http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf>



ANTCOM CORPORATION . 367 Van Ness Way, Suite 602 . Torrance, CA 90501 . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: antennas@antcom.com . <http://www.antcom.com>

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SPECIFICATIONS

REVISIONS		DATE	APPROVED
ZONE	REV	DESCRIPTION	
-	-	-	-

ELECTRICAL:

FREQUENCY:	L1: (1575.42 ±12) MHz	L2: (1227.60 ±12) MHz
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	DUAL RHCP/LHCP	
VSWR:	< 1.5:1	< 1.5:1
IMPEDANCE:	50 ohms	50 ohms
ANTENNA GAIN (dBic):	Free Space 3 in G.P.	Free Space 3 in G.P.
@ 90 ° (ZENITH):	- 0.8 + 3.8	-3.7 + 2.7
@ 10 ° Elevation:	- 9.3 - 4.3	- 9.9 - 6.3
@ 20 ° Elevation:	- 6.8 - 2.2	- 9.2 - 4.2
@ 30 ° Elevation:	- 5.2 - 0.7	- 7.8 - 2.4
@ 60 - 90 ° Elevation:	> - 2.1 > 2.5	> - 4.7 > 1.3
BEAM WIDTH (3dB):	100 Deg. 120 Deg.	100 Deg. 90 Deg.
AXIAL RATIO:	2.5 dB	3 dB
LIGHTNING PROTECTION:	DC GROUNDING	

LNA OPTION:

LNA GAIN: 24.0 dB
 LNA NOISE FIGURE: 1.8 dB
 LNA P 1dB Out: +16 dBm
 VOLTAGE/CURRENT: (+2.8 TO +28) Volts DC / (15 TO 25) mA

MECHANICAL:

SIZE: 1.250 in.[31.75 mm] SQ.
 HEIGHT: 0.512 in. [13.0 mm]
 WEIGHT: 1.1 oz. (31.2 g)
 FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
 BASE IRIDITE PER MIL-C-5441
 MATERIAL: 6061-T6 ALUMINUM ALLOY BASE
 COMPOSITE RADOME, ABRASION, UV, SOLVENT,
 SKYDROL RESISTANCE, AND FIRE RETARDANT
 CONNECTOR: X in" LONG FLEXIBLE CABLE / CONNECTOR
 (OPTION: SMB, SMC, SMP, SSMA, SSMB, SSMC, SMP,
 OR HFL)

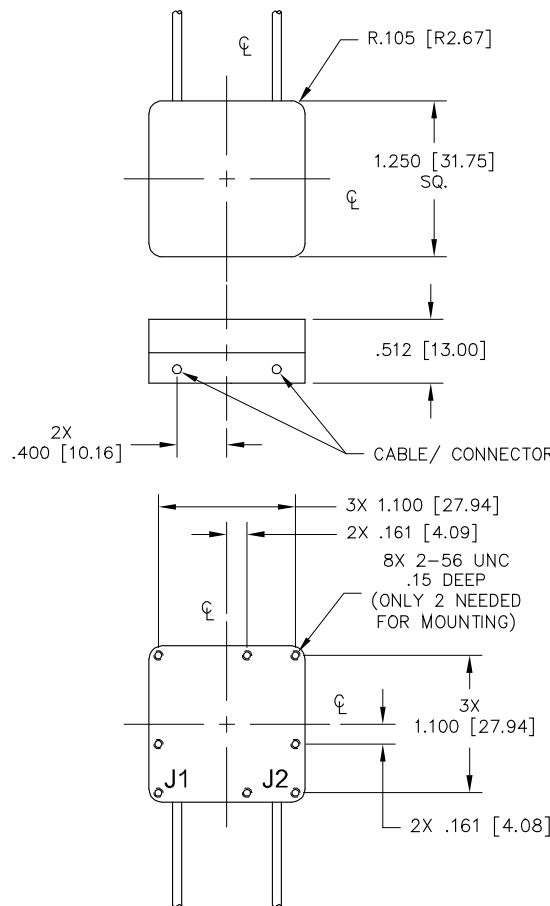
ENVIRONMENTAL:

TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]
 ALTITUDE: 70,000 ft.
 VIBRATION: > 30 G's
 LEAKAGE: HERMETICALLY SEAL

FEDERAL & MILITARY SPECIFICATIONS:

DESIGN TO: FAA TSO-C144, DO-160D, D0-228, MIL-C-5541,
 MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100



SIZE:	FREQ. BAND:	LNA:
1: 2" SQ.	1215: L1/L2	A2: WITH 20 dB LNA
1.9: 1.9" SQ.	15: L1 ONLY	A4: WITH 40 dB LNA
2: 2.6" DIA.		P: PASSIVE (WITHOUT LNA)
3: 3.5" DIA.		P2: J1: (L1/2 RHCP), J2: (L1/L2 LHCP)
4: MINI ARINC		P2S: J1: L1 RHCP, J2: L2 RHCP
		P2L: J1: (L1/2 LINEAR-E), J2: (L1/L2 LINEAR-H)

P/N: 1.2G1215P2S-XNMM-4-S

CABLE'S LENGTH:	CONNECTOR:	COLOR:
X: NO CABLE	S: SMA, T: TNC	-1: GLOSS WHITE #17925 PER FED-STD-595B
#: CABLE LENGTH (IN)	MM: MMCX, SMB, SMC, SSMA, SSMB,	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
	SSMC, SMP, SSMP, HFL	-3: OLIVE DRAB GREEN #34094 PER FED-STD-595B
		-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
		-5: TAN #33446 PER FED-STD-595B

QUANTITY REQD	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH
1	ADHESIVE GASKET	12345G-3M-1.2G	-	-	-
-2	-1				

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS TOLERANCES ANGLES ± 1/64 .004 .005 ± 1°	ORIGINALLY DRAWN S. HUYNH Mar-11-05	ANTCOM CORP. TORRANCE, CALIFORNIA DUAL L1/L2 ACTIVE or PASSIVE GPS ANTENNA PART NUMBER: D13CVE1 1.2G1215P2S-XNMM-4-S SCALE: 1/1 SHEET 1 OF 1
TOLERANCE 5VF PER ANSI Y14.5 BREAK EXTENSION EDGES .005 TO .010 SURFACE FINISHES PER MIL-C-8878 POLS OF A COINING & 25.003 MACHINED SURFACES	ORIGINALLY DESIGNED S. HUYNH Mar-11-05	
DO NOT SCALE DRAWING	UPDATED S. HUYNH July-24-14	
	UPDATE DRAWN P. TRAN July-24-14	

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [MM]
 NOTES: UNLESS OTHERWISE SPECIFIED: